## **AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows.

- 1. (Currently Amended) A network of peer-to-peer enterprise information systems comprising:
  - a first source system for publishing a data change of an attribute of [[an]] a first entity of the first source system, wherein said first entity is one of a first plurality of entities;
  - a unified entity-relationship system comprising said <u>first</u> plurality of entities, said <u>first</u> plurality of entities each comprising a plurality of attributes;
  - at least one subsumed entity-relationship system coupled to said unified entityrelationship system, wherein said <u>first plurality of</u> entities of said unified entityrelationship system are mapped to one another and to <u>a second plurality of</u>
    entities and attributes of <u>said second plurality of</u> entities of said subsumed
    entity-relationship system;
  - a join engine peer coupled to said unified entity-relationship system for performing joins and splits to form related entities according to a join model;
  - a global object model coupled to said join engine peer, said global object model comprising a first mapped relationship of said mapped relationships and said join model specifying transformations and queries required for forming [[said]] a second entity from a set of related entities, wherein at least one of said set of related entities is obtained from a second source system, and wherein said first mapped relationship is used by said join engine peer to enforce data consistency between said first entity and said second entity; and
  - a third source system for storing <u>said data change in</u> said <u>second</u> entity formed by said join engine peer.
- 2. (Currently Amended) The network of Claim 1, wherein said <u>second plurality of</u> entities are mapped by automatically importing schemas of databases for said entities into said global object model and correlating relationships between related entities.

3. (Currently Amended) A network as described in Claim 2 wherein the attributes of [[an]] said first entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship system.

- 4. (Currently Amended) A network as described in Claim 2, wherein a subset of the attributes of said <u>first</u> entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship.
- 5. (Currently Amended) A network as described in Claim 2, wherein said <u>first</u> entity in said unified entity-relationship system is mapped a plurality of times to a corresponding individual entity within a plurality of subsumed entity-relationship systems.
- 6. (Currently Amended) A network as described in Claim 2, wherein said <u>first</u> entity within said unified entity-relationship system is mapped to said set of related entities within a single subsumed entity-relationship system, said unified entity-relationship system being mapped to a different set of attributes for each of said set of related entities.
- 7. (Original) A network as described in Claim 2, wherein said global object model is maintained in a versioned store.
- 8. (Original) A network as described in Claim 7, wherein join engines throughout said network maintain a copy of said object model obtained from said versioned store.
- 9. (Original) A network as described in Claim 2, wherein said schemas are hierarchical.
- 10. (Original) A network as described in Claim 9, wherein a schema is extended from a parent class entity to a child class entity based on user-defined parent-child inheritance relationships.
- 11. (Original) A network as described in Claim 10, wherein said child class entity inherits relationships from said parent class entity.

12. (Previously Presented) A network as described in Claim 1, wherein said set of related entities are marked for cascading deletes.

- 13. (Currently Amended) A network as described in Claim 12, wherein a deletion of said <u>first</u> entity results in the automatic deletion of related entities that are marked for cascading deletes.
- 14. (Currently Amended) A method of forming a global attribute object model in a network of connected enterprise information systems comprising:
  - mapping entities within a unified entity-relationship system to entities within subsumed entity-relationship systems;
  - specifying relationships between mapped entities to generate a unified entityrelationship model;
  - publishing a data change of an attribute of [[an]] <u>a first</u> entity stored on a first source system, wherein said <u>first</u> entity is one of said entities within said subsumed entity-relationship systems; and
  - using said global attribute object model, comprising a first mapped relationship, in conjunction with a join model for enforcing data consistency within said network by:
    - forming, by said join engine peer, <u>a second</u> [[said]] entity from a set of related entities, wherein at least one of said set of related entities is obtained from a second source system; and
    - using said first mapped relationship to enforce said data consistency between said first entity and said second entity; and
  - storing said data change in said second entity on a third source system.
- 15. (Currently Amended) The method as described in Claim 14 wherein said second plurality of entities are mapped by importing schemas of databases for said entities into said global attribute object model and correlating relationships between related entities.

16. (Currently Amended) A method as described in Claim 15 wherein all of the attributes of said <u>first</u> entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship system.

- 17. (Currently Amended) A method as described in Claim 15 wherein a subset of the attributes of said <u>first</u> entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship system.
- 18. (Currently Amended) A method as described in Claim 15 wherein said <u>first</u> entity in said unified entity-relationship system is mapped a plurality of times to a corresponding individual entity within a plurality of subsumed entity-relationship systems.
- 19. (Currently Amended) A method as described in Claim 15 wherein said <u>first</u> entity within said unified entity-relationship system is mapped to said set of related entities within a single subsumed entity-relationship system, said unified entity-relationship system being mapped to a different set of attributes for each of said set of related entities.
- 20. (Original) The method as described in Claim 14 wherein said global attribute object model is maintained in a versioned store for allowing users to deploy a specific version compatible with their system configuration.
- 21. (Original) A method as described in Claim 20 further comprising maintaining a copy of said global attribute object model within a plurality of join engine peers.
- 22. (Original) A method as described in Claim 15 wherein said schemas are hierarchical.
- 23. (Original) A method as described in Claim 22 wherein a schema is extended from a parent class entity to a child class entity based on user-defined parent-child inheritance relationships.
- 24. (Original) A method as described in Claim 23 wherein said child class entity inherits relationships from said parent class entity.

25. (Previously Presented) A method as described in Claim 14 wherein said set of related entities are marked for cascading deletes.

- 26. (Currently Amended) A method as described in Claim 25 wherein a deletion of said <u>first</u> entity results in the automatic deletion of related entities that are marked for cascading deletes.
- 27. (Currently Amended) A computer-usable medium having computer-readable program code embodied therein for causing a computer to perform a method of communicating data within a network of peer-to-peer enterprise information systems, said method comprising:
  - mapping entities within a unified entity-relationship system to entities within subsumed entity-relationship systems;
  - implementing user-specified relationships between mapped entities to generate a unified entity-relationship model;
  - publishing a data change of an attribute of [[an]] <u>a first</u> entity stored on a first source system, wherein said <u>first</u> entity is one of said entities within said subsumed entity-relationship systems; and
  - using said global attribute object model, comprising a first mapped relationship, in conjunction with a join model for enforcing data consistency within said network by:
    - forming, by said join engine peer, <u>a second</u> [[said]]entity from a set of related entities, wherein at least one of said set of related entities is obtained from a second source system; and
    - using said first mapped relationship to enforce said data consistency between said first entity and said second entity; and
  - storing said data change in said second entity on a third source system.
- 28. (Currently Amended) The computer-usable medium as described in Claim 27 wherein said second plurality of entities are mapped by automatically importing schemas of databases for

said entities into said global attribute object model and correlating relationships between related entities.

- 29. (Currently Amended) A computer-usable medium as described in Claim 28 wherein the attributes of said <u>first</u> entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship system.
- 30. (Currently Amended) A computer-usable medium as described in Claim 28 wherein a subset of the attributes of said <u>first</u> entity of said subsumed entity-relationship system are mapped to corresponding attributes of entities of said unified entity-relationship system.
- 31. (Currently Amended) A computer-usable medium as described in Claim 28 wherein said first entity in said unified entity-relationship system is mapped a plurality of times to a corresponding individual entity within a plurality of subsumed entity-relationship systems.
- 32. (Currently Amended) A computer-usable medium as described in Claim 28 wherein said <u>first</u> entity within said unified entity-relationship system is mapped to said set of related entities within a single subsumed entity-relationship system, said unified entity-relationship system being mapped to a different set of attributes for each of said set of related entities.
- 33. (Original) A computer-usable medium as described in Claim 28 wherein said global attribute object model is maintained in a versioned store for allowing users to deploy a specific version compatible with their system configuration.
- 34. (Original) A computer-usable medium as described in Claim 33 further comprising maintaining a copy of said global attribute object model within a plurality of join engine peers.
- 35. (Original) A computer-usable medium as described in Claim 28 wherein said schemas are hierarchical.

36. (Original) A computer-usable medium as described in Claim 35 wherein a schema is extended from a parent class entity to a child class entity based on used-defied parent-child inheritance relationships.

- 37. (Original) A computer-usable medium as described in Claim 36 wherein said child class entity inherits relationships from said parent class entity.
- 38. (Previously Presented) A computer-usable medium as described in Claim 27 wherein said set of related entities are marked for cascading deletes.
- 39. (Currently Amended) A computer-usable medium as described in Claim 38 wherein a deletion of said <u>first</u> entity results in the automatic deletion of said set of related entities that are marked for cascading deletes.